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(54) **STEAM TURBINE**

(57) Abstract:

PURPOSE: To improve cooling effect to a turbine rotor in order to improve reliability of a steam turbine, by installing clearance adjusting members at a specified location on the surface of the inner ring of a nozzle diaphragm facing to the impeller of the turbine rotor, while said clearance adjusting members being to lessen the axial clearance between said impeller and said inner ring.

CONSTITUTION: On the surface of the inner ring 44 of a nozzle diaphragm, facing to the impeller of a turbine rotor 50 and at a location corresponding to root parts of turbine blades, clearance adjusting members 60 are installed which are to lessen the axial clearance between 50 and 44. As for said clearance adjusting member 60, labyrinth packings 60a are fitted in the inner ring 44 of the nozzle diaphragm in an annular form to face to root parts of said turbine blades 46 of said impeller 50, and said labyrinth packings 60a are inserted in a ring groove 61 formed on said inner ring 44, of the nozzle diaphragm with their base parts 60b turned into said groove 61. Due to the above construction, cooling steam velocity at the root parts of said turbine blades 46 can be made equal to or larger

than the velocity of cooling steam at the inside of said inner ring 44 of the nozzle diaphragm.

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